Key Terms

anorexia nervosa eating disorder characterized by an individual maintaining body weight that is well below average through starvation and/or excessive exercise

bariatric surgery type of surgery that modifies the gastrointestinal system to reduce the amount of food that can be eaten and/or limiting how much of the digested food can be absorbed

basolateral complex part of the brain with dense connections with a variety of sensory areas of the brain; it is critical for classical conditioning and attaching emotional value to memory

binge eating disorder type of eating disorder characterized by binge eating and associated distress

bisexual emotional and erotic attractions to both same-sexed individuals and opposite-sexed individuals

body language emotional expression through body position or movement

bulimia nervosa type of eating disorder characterized by binge eating followed by purging

Cannon-Bard theory of emotion physiological arousal and emotional experience occur at the same time

central nucleus part of the brain involved in attention and has connections with the hypothalamus and various brainstem areas to regulate the autonomic nervous and endocrine systems' activity

cognitive-mediational theory our emotions are determined by our appraisal of the stimulus

components of emotion physiological arousal, psychological appraisal, and subjective experience

cultural display rule one of the culturally specific standards that govern the types and frequencies of emotions that are acceptable

distorted body image individuals view themselves as overweight even though they are not

drive theory deviations from homeostasis create physiological needs that result in psychological drive states that direct behavior to meet the need and ultimately bring the system back to homeostasis

emotion subjective state of being often described as feelings

excitement phase of the sexual response cycle that involves sexual arousal

extrinsic motivation motivation that arises from external factors or rewards

facial feedback hypothesis facial expressions are capable of influencing our emotions

gender dysphoria diagnostic category in DSM-5 for individuals who do not identify as the gender associated with their biological sex

gender identity individual's sense of being male or female

habit pattern of behavior in which we regularly engage

heterosexual emotional and erotic attractions to opposite-sexed individuals

hierarchy of needs spectrum of needs ranging from basic biological needs to social needs to self-actualization

homosexual emotional and erotic attractions to same-sexed individuals

instinct species-specific pattern of behavior that is unlearned

intrinsic motivation motivation based on internal feelings rather than external rewards

James-Lange theory of emotion emotions arise from physiological arousal

leptin satiety hormone

metabolic rate amount of energy that is expended in a given period of time

morbid obesity adult with a BMI over 40

motivation wants or needs that direct behavior toward some goal

obese adult with a BMI of 30 or higher

orgasm peak phase of the sexual response cycle associated with rhythmic muscle contractions (and ejaculation)

overweight adult with a BMI between 25 and 29.9

plateau phase of the sexual response cycle that falls between excitement and orgasm

polygraph lie detector test that measures physiological arousal of individuals as they answer a series of questions

refractory period time immediately following an orgasm during which an individual is incapable of experiencing another orgasm

resolution phase of the sexual response cycle following orgasm during which the body returns to its unaroused state

Schachter-Singer two-factor theory of emotion emotions consist of two factors: physiological and cognitive

satiation fullness; satisfaction

self-efficacy individual's belief in his own capabilities or capacities to complete a task

set point theory assertion that each individual has an ideal body weight, or set point, that is resistant to change

sexual orientation emotional and erotic attraction to same-sexed individuals, opposite-sexed individuals, or both

sexual response cycle divided into 4 phases including excitement, plateau, orgasm, and resolution

transgender hormone therapy use of hormones to make one's body look more like the opposite-sex

Yerkes-Dodson law simple tasks are performed best when arousal levels are relatively high, while complex tasks are best performed when arousal is lower

Summary

This content is available for free at http://legacy.cnx.org/content/col11629/1.4

10.1 Motivation

Motivation to engage in a given behavior can come from internal and/or external factors. Multiple theories have been put forward regarding motivation. More biologically oriented theories deal with the ways that instincts and the need to maintain bodily homeostasis motivate behavior. Bandura postulated that our sense of self-efficacy motivates behaviors, and there are a number of theories that focus on a variety of social motives. Abraham Maslow's hierarchy of needs is a model that shows the relationship among multiple motives that range from lower-level physiological needs to the very high level of self-actualization.

10.2 Hunger and Eating

Hunger and satiety are highly regulated processes that result in a person maintaining a fairly stable weight that is resistant to change. When more calories are consumed than expended, a person will store excess energy as fat. Being significantly overweight adds substantially to a person's health risks and problems, including cardiovascular disease, type 2 diabetes, certain cancers, and other medical issues. Sociocultural factors that emphasize thinness as a beauty ideal and a genetic predisposition contribute to the development of eating disorders in many young females, though eating disorders span ages and genders.

10.3 Sexual Behavior

The hypothalamus and structures of the limbic system are important in sexual behavior and motivation. There is evidence to suggest that our motivation to engage in sexual behavior and our ability to do so are related, but separate, processes. Alfred Kinsey conducted large-scale survey research that demonstrated the incredible diversity of human sexuality. William Masters and Virginia Johnson observed individuals engaging in sexual behavior in developing their concept of the sexual response cycle. While often confused, sexual orientation and gender identity are related, but distinct, concepts.

10.4 Emotion

Emotions are subjective experiences that consist of physiological arousal and cognitive appraisal. Various theories have been put forward to explain our emotional experiences. The James-Lange theory asserts that emotions arise as a function of physiological arousal. The Cannon-Bard theory maintains that emotional experience occurs simultaneous to and independent of physiological arousal. The Schachter-Singer two-factor theory suggests that physiological arousal receives cognitive labels as a function of the relevant context and that these two factors together result in an emotional experience.

The limbic system is the brain's emotional circuit, which includes the amygdala and the hippocampus. Both of these structures are implicated in playing a role in normal emotional processing as well as in psychological mood and anxiety disorders. Increased amygdala activity is associated with learning to fear, and it is seen in individuals who are at risk for or suffering from mood disorders. The volume of the hippocampus has been shown to be reduced in individuals suffering from posttraumatic stress disorder.

The ability to produce and recognize facial expressions of emotions seems to be universal regardless of cultural background. However, there are cultural display rules which influence how often and under what circumstances various emotions can be expressed. Tone of voice and body language also serve as a means by which we communicate information about our emotional states.

Review Questions

1. Need for _____ refers to maintaining positive relationships with others.

a. achievement
b. affiliation
c. intimacy
d. power

2. _____ proposed the hierarchy of needs.

a. William James
b. David McClelland
c. Abraham Maslow
d. Albert Bandura

3. _____ is an individual's belief in her capability to complete some task.
a. physiological needs
b. self-esteem
c. self-actualization
d. self-efficacy

4. Carl mows the yard of his elderly neighbor each week for $20. What type of motivation is this?
a. extrinsic
b. intrinsic
c. drive
d. biological

5. According to your reading, nearly _____ of the adult population in the United States can be classified as obese.
a. one half
b. one third
c. one fourth
d. one fifth

6. _____ is a chemical messenger secreted by fat cells that acts as an appetite suppressant.
a. orexin
b. angiotensin
c. leptin
d. ghrelin

7. _____ is characterized by episodes of binge eating followed by attempts to compensate for the excessive amount of food that was consumed.
a. Prader-Willi syndrome
b. morbid obesity
c. anorexia nervosa
d. bulimia nervosa

8. In order to be classified as morbidly obese, an adult must have a BMI of _____.
a. less than 25
b. 25–29.9
c. 30–39.9
d. 40 or more

9. Animal research suggests that in male rats the _____ is critical for the ability to engage in sexual behavior, but not for the motivation to do so.
a. nucleus accumbens
b. amygdala
c. medial preoptic area of the hypothalamus
d. hippocampus

10. During the _____ phase of the sexual response cycle, individuals experience rhythmic contractions of the pelvis that are accompanied by uterine contractions in women and ejaculation in men.
a. excitement
b. plateau
c. orgasm
d. resolution

11. Which of the following findings was not a result of the Kinsey study?
a. Sexual desire and sexual ability can be separate functions.
b. Females enjoy sex as much as males.
c. Homosexual behavior is fairly common.
d. Masturbation has no adverse consequences.

12. If someone is uncomfortable identifying with the gender normally associated with their biological sex, then he could be classified as experiencing _____.
a. homosexuality
b. bisexuality
c. heterosexuality
d. gender dysphoria

13. Individuals suffering from posttraumatic stress disorder have been shown to have reduced volumes of the _____.
a. amygdala
b. hippocampus
c. hypothalamus
d. thalamus

14. According to the _____ theory of emotion, emotional experiences arise from physiological arousal.
a. James-Lange
b. Cannon-Bard
c. Schachter-Singer two-factor
d. Darwinian

15. Which of the following is not one of the seven universal emotions described in this chapter?
a. contempt
b. disgust
c. melancholy
d. anger

This content is available for free at http://legacy.cnx.org/content/col11629/1.4

16. Which of the following theories of emotion would suggest that polygraphs should be quite accurate at differentiating one emotion from another?

a. Cannon-Bard theory
b. James-Lange theory
c. Schachter-Singer two-factor theory
d. Darwinian theory

Critical Thinking Questions

17. How might someone espousing an arousal theory of motivation explain visiting an amusement park?

18. Schools often use concrete rewards to increase adaptive behaviors. How might this be a disadvantage for students intrinsically motivated to learn? What are educational implications of the potential for concrete rewards to diminish intrinsic motivation for a given task?

19. The index that is often used to classify people as being underweight, normal weight, overweight, obese, or morbidly obese is called BMI. Given that BMI is calculated solely on weight and height, how could it be misleading?

20. As indicated in this section, Caucasian women from industrialized, Western cultures tend to be at the highest risk for eating disorders like anorexia and bulimia nervosa. Why might this be?

21. While much research has been conducted on how an individual develops a given sexual orientation, many people question the validity of this research citing that the participants used may not be representative. Why do you think this might be a legitimate concern?

22. There is no reliable scientific evidence that gay conversion therapy actually works. What kinds of evidence would you need to see in order to be convinced by someone arguing that she had successfully converted her sexual orientation?

23. Imagine you find a venomous snake crawling up your leg just after taking a drug that prevented sympathetic nervous system activation. What would the James-Lange theory predict about your experience?

24. Why can we not make causal claims regarding the relationship between the volume of the hippocampus and PTSD?

Personal Application Questions

25. Can you think of recent examples of how Maslow's hierarchy of needs might have affected your behavior in some way?

26. Think about popular television programs on the air right now. What do the women in these programs look like? What do the men look like? What kinds of messages do you think the media is sending about men and women in our society?

27. Issues related to sexual orientation have been at the forefront of the current political landscape. What do you think about current debates on legalizing same-sex marriage?

28. Think about times in your life when you have been absolutely elated (e.g., perhaps your school's basketball team just won a closely contested ballgame for the national championship) and very fearful (e.g., you are about to give a speech in your public speaking class to a roomful of 100 strangers). How

would you describe how your arousal manifested itself physically? Were there marked differences in physiological arousal associated with each emotional state?

This content is available for free at http://legacy.cnx.org/content/col11629/1.4